

20000722.qrp v01\_n890.qrl.20000722

Date: Sat, 22 Jul 2000 19:03:12 EDT

From: qrp-l@Lehigh.EDU

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: QRP-L digest 1890

QRP-L Digest 1890

Topics covered in this issue include:

- 1) [75593] Re: [75475] Re: This has got to be the worst solar cycle!  
by Doug Faunt N6TQS +1-510-655-8604 <faunt@netcom.com>
- 2) [75594] PC Poquet Plus is sold.  
by Mercxx@aol.com
- 3) [75595] Summerfest Ham Convention, QRP dinner and Forum/prizes  
by Stuart Rohre <rohre@arlut.utexas.edu>
- 4) [75596] QRM on 40M?  
by ARDUJENSKI@aol.com
- 5) [75597] Re: Fox QRM  
by tom palmer <n1tp@worldnet.att.net>
- 6) [75598] power meters  
by Anthony Felino <anthony@pacinfosb.com>
- 7) [75599] Re: RAMBLINGS: Novic Frequencies  
by W1R0@aol.com
- 8) [75600] REVIEW:No.Equip. Float Charger  
by JP <jdanter@mail.i-america.net>
- 9) [75601] Re: Fox QRM  
by "Marshall Emm" <mgemm@mtechnologies.com>
- 10) [75602] ANTS: Bi Square is really a Lazy H array  
by Stuart Rohre <rohre@arlut.utexas.edu>
- 11) [75603] RE> Want to go "Retro"  
by herr@ridgecrest.ca.us (Michael Herr)
- 12) [75604] Re: REVIEW:No.Equip. Float Charger  
by Jeff <fantbb@yahoo.com>
- 13) [75605] On topic: Sucessful rehabilitation of SW40+  
by "Terry Bassett" <mutabut@net66.com>
- 14) [75606] Re: power meters  
by Pete Burbank <plburbank@kih.net>
- 15) [75607] Re: [Elecrafft] Re: Noise Generator: WARNING: SALES PITCH AHEAD  
by GE1am30092@aol.com
- 16) [75608] OT: Amateur Astronomy near Ft. Tuthill  
by jaywa5whn@juno.com
- 17) [75609] SMiTe Fox  
by Dan Wolfe <n4roa@mounet.com>
- 18) [75610] Re: RAMBLINGS: Novic Frequencies  
by Anthony Bailey <abailey@clas.net>
- 19) [75611] New Products at Morse Express

- by "Marshall Emm" <mgemm@mtechnologies.com>
- 20) [75612] Re: Elecraft K1 Internal Pictures  
by DYARNES@aol.com
- 21) [75613] Re: ANTS: Bi Square is really a Lazy H array  
by Bill Stietenroth <k5zty@juno.com>
- 22) [75614] Re: Wattmeter thoughts  
by david sarraf <david.sarraf@paonline.com>
- 23) [75615] Re: Elecraft K1 Internal Pictures  
by Phil Wheeler <w7ox@earthlink.net>
- 24) [75616] Re: [brasspounders] New Products at Morse Express  
by AdamN7YA@aol.com
- 25) [75617] Magnet Wire Source  
by "Chuck Carpenter" <w5usj@globeco.net>
- 26) [75618] Re: plcc 28 pin socket pin info - where?  
by "Larry Wise" <lewise@txwises.com>
- 27) [75619] Callsign lookup via QRP-L  
by Rick McKee <kc8aon@juno.com>
- 28) [75620] Re: RAMBLINGS: Novic Frequencies  
by Macstein@aol.com
- 29) [75621] FREE MAGNET WIRE  
by Drbob92031@aol.com
- 30) [75622] For Sale  
by "Charles DD Feigley Sr." <feigley2@juno.com>
- 31) [75623] Re: Latin for Less Power More Fun  
by Jeff Francis <jfrancis@frii.com>
- 32) [75624] FS: Red Hot 40  
by "Jim Crooke" <crooke@prodigy.net>
- 33) [75625] The Impact of Operating QRP in Sweepstakes  
by "James R. Duffey" <jamesd1@flash.net>
- 34) [75626] WTB: DSW-40 xcvr  
by "Alan Fryer" <n3bj@hotmail.com>
- 35) [75627] RE: FS:Red Hot 40  
by "Jim Crooke" <crooke@prodigy.net>
- 36) [75628] Built-in ATU option for the K1: the KAT1  
by Wayne Burdick <n6kr@elecraft.com>
- 37) [75629] PSK31 & ThinkPad ??s  
by "Chuck Carpenter" <w5usj@globeco.net>
- 38) [75630] Wanted RedHot 20  
by Jeff <fantbb@yahoo.com>
- 39) [75631] Re: FREE MAGNET WIRE  
by Lee Bahr <w5drc@earthlink.net>
- 40) [75632] Re: RAMBLINGS: Novic Frequencies  
by KD1YV <kd1yv@mindspring.com>
- 41) [75633] Re: PSK31 & ThinkPad ??s  
by NB6M@aol.com
- 42) [75634] 10 M and 15 M Useful Even When Solar Flux is Down  
by "James R. Duffey" <jamesd1@flash.net>
- 43) [75635] FOX and Other things

by "jay henson" <jbhenson@zebra.net>  
44) [75636] Re: FREE MAGNET WIRE  
by Chris Trask <ctrask@primenet.com>  
45) [75637] New Info on Elecraft Builder's Page  
by Eric Swartz WA6HHQ - Elecraft <eric@elecraft.com>

-----  
Date: Fri, 21 Jul 2000 16:11:53 -0700 (PDT)  
From: Doug Faunt N6TQS +1-510-655-8604 <faunt@netcom.com>  
To: DYARNES@aol.com  
Cc: pwomble1@tampabay.rr.com, qrp-1@lehigh.edu  
Subject: [75593] Re: [75475] Re: This has got to be the worst solar cycle!  
Message-ID: <200007212311.QAA09304@netcom.com>

Things were pretty good this morning. I could copy 7P8AA on RTTY this morning, although they didn't hear me. I'm on the west coast, with a vertical.

73, doug

Date: Thu, 20 Jul 2000 19:00:07 EDT  
From: DYARNES@aol.com

In a message dated 7/20/00 10:25:08 AM US Mountain Standard Time, pwomble1@tampabay.rr.com writes:

<< From Central Florida last night 20m was in great shape. >>

I'm not trying to minimize your efforts, but I've always found working Europe, and even Africa sometimes, like shooting ducks on a pond from anywhere on the east coast. It's a bunch different from the west, particularly from New Mexico or here in Arizona. I certainly do agree that this cycle has been a disappointment so far. Some days have been very good,

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Date: Fri, 21 Jul 2000 19:48:20 EDT  
From: Mercxx@aol.com  
To: qrp-1@lehigh.edu  
Subject: [75594] PC Poquet Plus is sold.  
Message-ID: <b9.527d3b5.26aa3b44@aol.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"  
Content-Transfer-Encoding: 7bit

Thanks to all who inquired the Poquet is sold.

72  
Steve  
N4TKP

-----  
Date: Fri, 21 Jul 2000 19:04:04 -0500  
From: Stuart Rohre <rohrer@arlut.utexas.edu>  
To: "qrp-1@lehigh.edu" <qrp-1@lehigh.edu>  
Subject: [75595] Summerfest Ham Convention, QRP dinner and Forum/prizes  
Message-ID: <3978E4FA.C2A3E7E9@arlut.utexas.edu>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Only a week away!!

The Summerfest Amateur Radio South Texas Section Convention is July 28 and 29. This is also the Summer Covention of the Texas VHF-FM Repeater Society. A full line of ARRL, DX, ARES, Amsat, New Ham and other forums is planned. The DX forum will feature winners from the IARU World Championship just completed in Europe. Dealers and both indoor and outdoor swap meets will be available.

On Fri., 28 July, you can register at 5 PM, at 6 PM the swap meet indoors opens in the Hilton Inn, Middle Fiskville Rd. by Highland Mall off 290 and IH 35. (Just a couple blocks from the Hotel used in 1999).

The QRP crowd will meet at the Convention Registration tables at 7:00-7:30 PM and go over to Lone Star Cafe across the street in Lincoln Center, for our annual gab fest and dinner, (Dutch Treat), Hey Dutch, you hear that?

There will be prize give aways at the dinner Fri. nite, and at the forum at 10 AM Sat.

The forum is in the meeting room in the Super 8 Motel next door to the North of Hilton.

Look at the web site for Summerfest at <repeater.org>. Use google.com search to find "Summerfest". Or go to your book mark for the Austin Radio Clubs web pages on repeater.org. There will be Summerfest links. We have Monty and John from Austin QRP Club, leading off our forum programs.

Monty will cover the intro and basics of QRP very comprehensively and we will have a show and tell of typical rigs. (Bring your favorites). John then will lead us into the newest digital aids to Morse, DIGITAL DNA. Those PICs are obsolete, guys and gals! And did I mention the give aways, as in prizes?

If there is time remaining we will have an antenna related paper at the end.

I have gotten back great model runs from Glen, K5FX of the giant Mike Albritton loop used by W5KA this past Field Day. Bet you have never seen a horizontal loop pattern like these! I hope to do a comparison of some great QRP antennas.

Remember to mail in your preregistrations for Summerfest and save on the on-site registration fee.

72,  
Stuart K5KVH  
Austin TX

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Date: Fri, 21 Jul 2000 20:11:45 EDT  
From: ARDUJENSKI@aol.com  
To: qrp-1@lehigh.edu  
Subject: [75596] QRM on 40M?  
Message-ID: <31.7df9951.26aa40c1@aol.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"  
Content-Transfer-Encoding: 7bit

Is it just my location or is 40M QRM (7040--7060) increasing? I have not been in radio real long time but I usually get up at 0'dark thirty and work a bunch of east coasters. Now I find this part of the band filled with SSB signals. In the evenings it seems a few digital folks like to visit this part of the band too. Is this propagation related or a changing times in DX operations?

alan kb7mbi

-----  
Date: Fri, 21 Jul 2000 20:19:29 -0400  
From: tom palmer <n1tp@worldnet.att.net>  
To: plburbank@kih.net  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [75597] Re: Fox QRM  
Message-ID: <3978E891.7C81692E@worldnet.att.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hello, Fox Hunters:

I am an active member of Fists.  
Fists are usuall very active between 14.058 and 14.061.

I believe posting to the FISTS folks will not solve the problem.

I recommed that, if possible, and band conditions permitting, the FOX hunts stay clear of the active FISTS frequencies.

Tom, N1TP

Pete Burbank wrote:

> Gangue,  
> Many of you are also FIST members. The QRP frequency is close  
> nearby and often there is a conflict or confusion resulting  
> from the activity. I'm not a fist member but applaud the  
> concept. The reason I'm not a member is the mindset about  
> numbers. I could expand on this ad nauseum but 'nuf said.  
> To get to the point...  
> Could we post QRP activity and times to the Fist Web to keep  
> QRO Nimrod #1e Bentley seven off the QRP frequency? Just out of  
> common courtesy? Or possibly entice the OP to turn the power knob  
> down and join the pile of yelping hounds.  
> I repeat...I applaud the Fist concept so don't bother with flames.  
> IDEAS????  
> 73/72/es 88 to the YLs  
> Pete NV4V

-----  
Date: Fri, 21 Jul 2000 16:26:45 -0800  
From: Anthony Felino <anthony@pacinfosb.com>  
To: plburbank@kih.net, qrp-1@lehigh.edu  
Subject: [75598] power meters  
Message-ID: <Chameleon.964225141.anthony@anthony-400>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; CHARSET=ISO-8859-1

"I was curious why Peltier diodes are not used in wattmeters so..."

Not so dirt simple, is it? The way "real" power meters work is a thermal bridge, where all the thermodynamic effects are cancelled out. Otherwise, you are dealing with a calorimeter type situation. I think the ARRL antenna book shows a calorimeter for VHF using an open piece of coax as a loss element. You supply power for a given amount of time and measure temperature rise. In this case you try not to lose heat, so you insulate instead of sink the heat away.

An HP-type ("real") power meter has two non-reactive resistors arranged in a

mechanically

symmetrical fashion. Both resistors will lose heat to the same ambient temperature at the same rate. There is a temperature sensor near each resistor. You apply your RF power to one resistor, and adjust the DC voltage to the other one to give you the same temperature on both sensors. This is done for you with a servo loop, of course, so that you just read the DC power on a meter and that is the same as the RF power.

These meters have different bolometer heads for different frequencies and power levels, with cal charts for variations with frequency.

Linear Technology makes a chip that has this all on a piece of silicon. It is the LT1088 and I don't know if it is made anymore, but the data sheet is on their website. They call it a RMS to DC converter, but of course this is the same thing. The data sheet shows diagrams that describe the process better than I can.

These schemes typically are used for measuring small amounts of power, and if you want

to measure transmitter power you use a big attenuator. These are terminating wattmeters. If you want to measure power in line, you use a line sampler (see Solid State

Design by W7ZOI) which provides both attenuation and non-intrusive (relatively) sampling.

I'm not sure from your description how you intended to measure power. What is the function of the Peltier device? Good Luck.

72, WN6Q

-----  
Anthony Felino, Pacific Information Design  
email: anthony@pacinfosb.com  
telephone: (805) 730 1565, x25  
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-----  
Date: Fri, 21 Jul 2000 20:40:39 EDT  
From: W1RO@aol.com  
To: ARDUJENSKI@aol.com, qrp-1@lehigh.edu  
Subject: [75599] Re: RAMBLINGS: Novic Frequencies  
Message-ID: <55.895693c.26aa4787@aol.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"  
Content-Transfer-Encoding: 7bit

If you hear me on the 40 meter Novice section I can only put my TT2 on 7113 and 7116....only got those 2 crystals for that area. If you like country music look for Patty Lovelace 7110 to 7120.

73

Jim

W1R0/7

-----  
Date: Fri, 21 Jul 2000 21:02:14 -0400  
From: JP <jdanter@mail.i-america.net>  
To: qrp-l@Lehigh.EDU  
Subject: [75600] REVIEW:No.Equip. Float Charger  
Message-ID: <3978F296.9570C700@mail.i-america.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Northern Equipment has a 12V Auto. Float Charger,  
#16739, discounted from \$15 to \$9.75.  
For wet and Gel cells rated between 5-125 AH. Floats @ 13.5V.  
Walwart regulator and an inline pkg.with LED indicators-Power and  
Charge.  
Comes with large clips for wet battery posts.  
Of course, I immediately modded to Stakons for Gel cell use.

Northern also has the ICP Global Technologies solar panels,  
with a plastic frame, rated @ 12V/5W, for \$75.

cul KF4VOP  
Jamie Danter

-----  
Date: Fri, 21 Jul 2000 19:08:41 -0600  
From: "Marshall Emm" <mgemm@mtechnologies.com>  
To: qrp-l@lehigh.edu, sfox@egroups.com  
Subject: [75601] Re: Fox QRM  
Message-ID: <39789FB9.6469.BB05F7@localhost>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT

>> IE, why use the QRP \*calling\* frequency for a contest? IE,  
>why set up on known/customary counter hunters or other net frequencies. <<

TBMK 14.060 and the other "QRP frequencies" were never meant to be "calling frequencies in the usual sense, but more like "watering holes" where we can



find each other and "hang out." There was a suggestion during the early 40M hunts that foxes should avoid operating on 7.040 but as I recall the reason for that was that many QRP rigs are crystal (or at best VXO) controlled and their operators don't have any choice as to where they can operate. That said, it would seem to me that a fox SHOULD operate there, or very close to it, or else those rockbound hounds won't have a chance for a pelt!

So far (I have managed a pelt in each hunt but have not listened to each hunt in its entirety) the only QRM problems other than digital have been the result of poor operating practice by someone not in the hunt. Each fox has done it by the book-- found a clear frequency, asked if it was in use, and LISTENED before starting the hunt. I can't read their minds, of course, but it even looked as if they were allowing for clear bandwidth on either side of their chosen transmitting frequency-- allowing for a spread out pileup is not only good operating practice but good fox operating practice [g].

Marshall Emm, N1FN  
Milestone Technologies, Inc.  
(303) 752-3382  
<http://www.mtechnologies.com>

-----  
Date: Fri, 21 Jul 2000 20:14:46 -0500  
From: Stuart Rohre <rohre@arlut.utexas.edu>  
To: "qrp-l@lehigh.edu" <qrp-l@lehigh.edu>  
Subject: [75602] ANTS: Bi Square is really a Lazy H array  
Message-ID: <3978F58B.56A2EF95@arlut.utexas.edu>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Just before Field Day, I was researching alternate antennas to try, and found from several of the many Antenna Books I have, that the Bi Square is the "electronic equivalent" of the venerable phased array known as the "Lazy H" .

To refresh the newer crowd, the Lazy H is a horizontal dipole over a dipole, with various phasing methods of feed depending on spacing, and the length of the dipoles.

L. B. Cebik, W4RNL, has covered the Lazy H as an ideal back up DX Antenna. Check out his discussion of it on <cebik.com>. It can do multi bands, if you size it for 5/8 dipole legs at 10M. Fed from dipole center to dipole center with non-crossed ladder line, and with ladder line in the middle of that to

the station, it is possible to get better than an octave frequency coverage. (An octave is a 2:1 spread, ie, from 10M to 20M or even lower with the transmatch.) It is a low angle radiator with good gain.

It turns out, if you figure the current in the Lazy H, and then construct a Bi Square, which is a diamond, with open ends at bottom and top, with bottom being the ladder line feed point; the thing has the same current sense and is a phased antenna also. You pull out the element ends that are joined at midpoint to form the diamond shape. This can be done with light line, as the single pole support hangs the whole thing from the top ends. What looks like two angled near vertical elements is really four elements. (On each side, you have joined ends at that midpoint you pulled out.)

The Bi Square shares the gain of the Lazy H, which is a very respectable 3 plus dB.

Now if you joined the top, besides destroying the low angle radiation good for DX, you go back to the simple gain of a vertical loop, about 2 dB on the fundamental where the loop is one wave around.

I think QST would have gotten more interest for the Bi Square if they had shown its relation to the phased dipole arrays. It seems like a perfect non beam single support DX antenna for the small yard or garden. Although some books suggest having the lowest part quite high, it might work well fairly close to poor RF ground. I have it on my agenda to try out at home. The best part, is that you could put up a pair as close spaced beam elements and have a stacked array! I even wonder if you could just use the one support and angle the director or reflector off the top of the pole. Another thought is W6RCA's idea of a single wire director angled off the support pole, as he suggested for an inverted Vee dipole gain element.

Size one for 10M and see how it plays with transmatch and ladder line feed for lower bands.

72,  
Stuart K5KVH

-----  
Date: Fri, 21 Jul 2000 18:55:38 -0700 (PDT)  
From: herr@ridgecrest.ca.us (Michael Herr)  
To: qrp-l@lehigh.edu, w2kj@earthlink.net  
Subject: [75603] RE> Want to go "Retro"  
Message-ID: <v01530507b59e39db5865@[204.154.246.81]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Joe,

I have a GR-81 but am using it! I'm having a fun time with the "retro",  
GR-81 (I built it back in '67 from prune picking money) . I run a little  
3A4 xmtr with it, pumping a 1/4 watt into the ether.  
...Mike WA6ARA  
>  
>Fellow QRP'ers:  
>  
>Have been thinking of going"retro" using a regen receiver and homebrew  
>transmitter. Anybody out there have an old Heathkit GR-81 regenerative  
>receiver that is collecting dust and not in use?? If so, I would like to  
>buy it and help you get rid of your shack "clutter":-)  
>  
>Does not have to be "minty" or "spotless" (of course I won't turn down a  
>beauty:-)...just needs to be in working order. Any of these rigs still out  
>there???

73, Joe W2KJ (North Carolina)  
I QRP, therefore I am

-----  
Date: Fri, 21 Jul 2000 19:10:07 -0700 (PDT)  
From: Jeff <fantbb@yahoo.com>  
To: qrp qrp <qrp-l@lehigh.edu>  
Subject: [75604] Re: REVIEW:No.Equip. Float Charger  
Message-ID: <20000722021007.21784.qmail@web124.yahoomail.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii

--- JP <jdanter@mail.i-america.net> wrote:  
> Northern Equipment has a 12V Auto. Float Charger,  
> #16739, discounted from \$15 to \$9.75.  
> For wet and Gel cells rated between 5-125 AH. Floats @ 13.5V.  
> Walwart regulator and an inline pkg.with LED indicators-Power and  
> Charge.  
> Comes with large clips for wet battery posts.  
> Of course, I immediately modded to Stakons for Gel cell use.  
>  
> Northern also has the ICP Global Technologies solar panels,  
> with a plastic frame, rated @ 12V/5W, for \$75.

Here's the URL;

<http://www.northerntool.com/>

Just trying to help out. They have nice deals and prices.

This in no way indicates that I work for them or the fact that I am taking large payments under the table to reccomend them to this group.

Jeff

=====

Jeff Jones

AB6MB

NorCal QRP Club #65, QRP-L #1780, ARCI 10071

Radical FIST Member 6798

Voicemail/Fax 1-888-Excite2 ext 925-439-2514

ICQ 62450117

-----  
Do You Yahoo!?

Get Yahoo! Mail Free email you can access from anywhere!

<http://mail.yahoo.com/>

-----  
Date: Fri, 21 Jul 2000 21:14:29 -0500

From: "Terry Bassett" <mutabut@net66.com>

To: <Qrp-l@LeHigh.edu>

Subject: [75605] On topic: Sucessful rehabilitation of SW40+

Message-ID: <000b01bff382\$ad816660\$ac47fa3f@pavilion>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Hello All,

I believe it was just yesterday that I posted about my problem with a SW40+ that I had loaned out last Fall to a young tech plus. When I got it back he said that it had an annoying noise in it and the receiver had quit working and also no power out.

Well, I am not sure what exactly he put the radio through, but it must have been tough. He probably then took it apart and tried adjusting those little screw-down looking parts. Anyhow, the point of this post is that I set the radio aside when I got it back this

spring thinking that it would make a good winter project. Then the Flares hit and I had to have some time with my radios. I got it out and tried some problem solving. Soon I realized that I could get the power out by myself, but the other problems were beyond me. So, I posted here asking for some ideas or guidance.

Well, it was quite gratifying that so many of you took time to pitch in. Especially public thanks to Dave Benson, Glen Leinweber and Dan Tayloe. Several others emailed me also with words of encouragement and advice. Dave took sort of a lead in my problems, even though the kit radio's age puts it well beyond anyone's concept of warranty. He still gave me the insights and help, just as though I bought the kit yesterday. Simply amazing... And Glen pitched in with several back and forth emails and in combination with Dan's words of advice and knowledge, these three led me out of the wilderness.

As to the actual problem... I had cut a turn off of L1 to move the vfo up to the N/T+ portion of the band. It tuned 7.103 to 7.130 +/- . I checked it at the time to make sure that it would only transmit in the N/T+ portion of the band, I don't recall really listening across the segment looking for Birdies. It never occurred to me. The birdie was at 7.110. Dave did the math... 9th harmonic of the L0 (at 3.111 Mhz) and the 7th harmonic of the IF (4 Mhz). He offered two solutions, but I chose a third route, which was to rewind L1 to move it back to 7.04. It now tunes 7.025 to 7.052. Voila, no birdie.

As the emails were going back and forth, I also replaced the rg58 I had used (because I thought the rg174 looked puny). I replaced it with rg174. While I had it apart this time, I checked every solder joint with a lighted magnifying glass. I found one joint

that might have been questionable. I desoldered and resoldered it.

The receiver still being deaf turned out to be the 5k pot used for the RF Gain control and one or more of the 1n4148 diodes at D7, D8, D9 and D10. Exactly which one I'm not sure. I replaced the 5k pot first and receive audio came up a little. Still, running a jumper from antenna connection to the high side of the pot made audio louder. Glen and Dave both had homed in on this aspect. I had a package of the diodes and it was easy to take the old ones out and replace with new.

When I put it back together this time, it played just wonderful. If I had it to do all over again, I'd still loan it out, because I gained so much in the repair process. Really, I mean it. I'm currently studying for the Extra exam and it is really rote memory stuff, but this, this is real learning. I might say once again that this is wonderful group of folks. I am humbled, but delighted. Now bring on the Fox.

72 es 73 to all,

Terry KA9TXE

-----  
Date: Fri, 21 Jul 2000 22:28:32 -0400  
From: Pete Burbank <plburbank@kih.net>  
To: Anthony Felino <anthony@pacinfosb.com>, <qrp-1@lehigh.EDU>  
Subject: [75606] Re: power meters  
Message-ID: <3.0.32.20000721222828.008d6f68@kih.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>  
>I'm not sure from your description how you intended to measure power. What  
is the function  
>of the Peltier device? Good Luck.  
>

>72, WN6Q

>

>-----

>Anthony Felino, Pacific Information Design

>email: anthony@pacinfosb.com

>telephone: (805) 730 1565, x25

>-----

The Peltier device converts heat to volts or vice versa

73 Pete..Pete's Hardware and TV

>

>

-----

Date: Fri, 21 Jul 2000 22:39:09 EDT

From: GElam30092@aol.com

To: n0ss@earthlink.net, kl0pe@hotmail.com, elecraft@qth.net, qrp-1@lehigh.edu

Subject: [75607] Re: [Elecraft] Re: Noise Generator: WARNING: SALES PITCH AHEAD

Message-ID: <77.724de26.26aa634d@aol.com>

MIME-Version: 1.0

Content-Type: text/plain; charset="US-ASCII"

Content-Transfer-Encoding: 7bit

In a message dated 7/21/2000 4:43:06 PM US Mountain Standard Time,  
n0ss@earthlink.net writes:

<< Although I cannot speak directly for the ScQRPions, I will tell you that I provided them with not only the board layout, but also all the docs (1 page, if I recall). The project is very easy(!) to construct, literally a 10-15 minute project, IF you work SLOWLY, so it won't be a problem. I feel certain they'll provide the docs as part of the 'kit'. The docs ARE now available on the DOWNLOAD page of my web site at: >>

Absolutely..... the pdf file was printed out today for inclusion in the kit. I also picked up most of the parts and am getting ready to build one up \*now\*.

(<<rant mode on>> Just as a sidenote: while at radioshack.com this evening, the clerk decided to answer her cellphone while waiting on me. After listening to 20 seconds of BS, I got the manager to get her out of the way. Who the heck taught these stupid people something called CUSTOMER SERVICE??? I wonder if I just should have yanked it out of her hands and \*discontinued\* the call. (Mesa Police... see the disturbance at radioshack.com on Country Club Dr.)

There, I feel better. <<rant mode off>>)

My gosh, you should have seen how many people asked Tom what he was using at FDI. I sat behind Tom for 20 minutes watching him set up filters on K2's.

It was amazing. That's when I knew it was a project whose time had come and begged Tom to let us package it up!

Again, obviously owning an Elecraft product isn't a prerequisite for this project. It's a neat little kit, thanks to N0SS, which you can use with any radio and Spectrogram to see your filters at work. It a very nicely packaged 15-minute project which you'll use quite often!

Thanks!  
Gerry Elam, K7LR0  
PHX AZ

-----  
Date: Fri, 21 Jul 2000 20:47:38 -0600  
From: jaywa5whn@juno.com  
To: qrp-l@lehigh.edu  
Cc: w5bi@arrl.net  
Subject: [75608] OT: Amateur Astronomy near Ft. Tuthill  
Message-ID: <20000721.204742.-543581.0.jaywa5whn@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain  
Content-Transfer-Encoding: 7bit

After a hard day of bargain hunting @ Ft. Tuthill on Friday July 28 and attending some superb QRP presentations in the Agriculture Bldg. from 1 PM - 4 PM during that same Friday. You can sit back, grab a cold one and heads towards the Amateur Astronomers area just south of Ft. Tuthill.

Free Admission to the Hamfest & Star Party.

<http://www.hamsrus.com/tuthill.html>

Friday July 28:

8:00 P.M. - Whenever MCS Stables (2 Miles South on Hiway 89A)  
Astronomical Viewing (Star Party) - Although not an official part of the convention, we have been invited to attend this function by The Coconino Astronomers group. For more information, see Star Party

QRP Info:

<http://www.extremezone.com/~nk7m/qrp2000.htm>



72...Jay, WA5WHN {C U @ Ft. Tuthill, less than 1 week to  
go}

-----  
YOU'RE PAYING TOO MUCH FOR THE INTERNET!  
Juno now offers FREE Internet Access!  
Try it today - there's no risk! For your FREE software, visit:  
<http://dl.www.juno.com/get/tagj>.

-----  
Date: Fri, 21 Jul 2000 22:38:24 -0400  
From: Dan Wolfe <n4roa@mounet.com>  
To: qrp-1@Lehigh.EDU  
Subject: [75609] SMiTe Fox  
Message-ID: <39790920.4968@mounet.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Howdy,

I will be the SMiTe Fox this Sunday evening(July 23) begining at  
9:30 PM local time (0130Z July 24). Listen for me on 3686.4....  
Come by for a visit with the mighty SMiTe.

72...Dan Wolfe, N4ROA, in Gate City, Va.

-----  
Date: Fri, 21 Jul 2000 22:08:16 -0500  
From: Anthony Bailey <abailey@clas.net>  
To: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>  
Subject: [75610] Re: RAMBLINGS: Novic Frequencies  
Message-ID: <v04210102b59ebfbd7732@[192.168.1.2]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii" ; format="flowed"

Likewise, I can only put my Vec-1240 on 7122, I've also got 7040 but  
using that freq will have to wait until I upgrade. Thanks for the  
info on Patty Lovelace, I'll have to try and hear her.

73

Tony

>If you hear me on the 40 meter Novice section I can only put my TT2 on 7113  
>and 7116....only got those 2 crystals for that area. If you like country  
>music look for Patty Lovelace 7110 to 7120.

>73

>Jim  
>W1R0/7

Sent from Anthony Bailey KC0HZP (mailto:abailey@clas.net)  
on a PowerComputing PowerBase 180 in Marble Hill, Missouri

-----  
Date: Fri, 21 Jul 2000 21:20:35 -0600  
From: "Marshall Emm" <mgemm@mtechnologies.com>  
To: qrp-l@lehigh.edu, brasspounders@e-groups.com, cqclist@cqc.org,  
Morse.Express@edison.chisp.net  
Subject: [75611] New Products at Morse Express  
Message-ID: <3978BEA3.17749.133C959@localhost>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT

We have the following new products-- keys and tools....

>From CT Keys, a new version of the Classic Camelback, the Deluxe version is mounted on a polished oak base and comes with attached cable. It's \$199.95.

And the new \$159.95 CT-12DX deluxe dual paddle is absolutely worth a look-- quite a departure from the first CT paddle, the straight-lever DX has a three-ring superstructure on a pillbox base, with individual spring and contact adjustment for each side. Very crisp and precise action! See it at <http://www.MorseX.com/ct> .

Jim Richards is making an updated and improved version of his single lever Fingertappers paddle. The new version features a black walnut fingerpiece and a machine engraved brass label on the side. \$99.95 at <http://www.MorseX.com/ftap>

In the tools department, we now have Q-Dope (yes, the original), from GC Thorsen, \$4.95 for the 2 oz applicator bottle. Also new (to us) is the original Archer precision lubricator (needle oiler) with teflon gel lubricant, perfect for a thousand applications around the shack, for \$3.50. See them at <http://www.MorseX.com/tools> .

As always, you can order on our secure server at <http://www.MorseX.com>, or use our toll-free credit card order line (800) 238-8205, or mail to Morse Express, 2460 S. Moline Way, Aurora CO 80014. For more information about the items mentioned here or any of our other products, visit our web site or call (303) 752-3382.

-----  
Date: Fri, 21 Jul 2000 23:40:40 EDT  
From: DYARNES@aol.com  
To: eric@elecraft.com, qrp-1@lehigh.edu  
Subject: [75612] Re: Elecraft K1 Internal Pictures  
Message-ID: <13.8595f7b.26aa71b8@aol.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"  
Content-Transfer-Encoding: 7bit

In a message dated 7/21/00 3:37:27 PM US Mountain Standard Time,  
eric@elecraft.com writes:

<< <http://www.fix.net/jparker/norcal/meetings/july2000/july12.htm> >>

Great pictures! Looks to me like there's enough extra room to add some  
goodies later, eh wat?

Dave W7AQK (on the list, but not holding my breath yet!)

-----  
Date: Fri, 21 Jul 2000 22:37:58 -0500  
From: Bill Stietenroth <k5zty@juno.com>  
To: rohre@arlut.utexas.edu  
Cc: qrp-1@Lehigh.EDU  
Subject: [75613] Re: ANTS: Bi Square is really a Lazy H array  
Message-ID: <20000721.224303.-3918413.0.k5zty@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain  
Content-Transfer-Encoding: 7bit

A Lazy H is not stacked dipoles. A dipole is a 1/2 wavelength center  
fed antenna. A lazy H is a broadside colinear array of four 1/2 wave  
elements fed in phase. A very high gain bidirectional antenna.

Bill, K5ZTY  
Houston, TX

On Fri, 21 Jul 2000 20:14:46 -0500 Stuart Rohre <rohre@arlut.utexas.edu>  
writes:

>  
> To refresh the newer crowd, the Lazy H is a horizontal dipole over a  
> dipole,  
> with various phasing methods of feed depending on spacing, and the

> length of  
> the dipoles.  
>

-----  
Date: Fri, 21 Jul 2000 23:46:30 -0400  
From: david sarraf <david.sarraf@paonline.com>  
To: Arjen Raateland <Arjen.Raateland@vyh.fi>  
Cc: qrp-l <qrp-l@Lehigh.EDU>  
Subject: [75614] Re: Wattmeter thoughts  
Message-ID: <39791915.29D3038F@paonline.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Arjen, Bob:

Using a peltier cooler to measure power is commonplace in the photovoltaic developer's community, especially for the folks that make infrared-sensitive high-output exotics such as InGaAs or InP. The cell under test is mounted to the cold side of a peltier cooler. A heat sink, generally a simple aluminum extrusion, is mounted to the hot side. As the cell is illuminated it warms up. A feedback circuit pumps power into the peltier to bring the cell back down to its original temperature. Since the power required by the peltier is a well-known and linear function of its heat load or throughput and its temperature, it is a simple matter to determine how much of the incident power left the back side of the PV cell as waste heat. The cell's efficiency can then be calculated from the electrical output of the cell and that measured waste heat.

The first advantage of this method is that the cell remains at a constant temperature through a test so its characteristics are not skewed by a temperature rise due to illumination. A second and important advantage is that the method allows measurement of small amounts of power with good accuracy. Drawbacks include the need for external power and a rather long time constant. Peltier coolers are rather inefficient and can require anywhere from 1/2 to 10 watts of power input for every watt of heat carried. The thermal mass of the system (heat sink and cooler) means that it could require many tens of seconds to reach steady state. The power requirement probably wouldn't be a big concern at QRP levels but the time constant could be a major impediment.

Linear Technologies just introduced an LT1088 wattmeter IC that looks quite promising. It is essentially two matched resistors with temperature sensors in an IC package. The incident power is converted

to heat in the first resistor. A feedback loop adds DC power to the second resistor until its temperature matches the first one. Since the resistor values are well matched and they have the same thermal path to the outside of the IC package the amount of DC power pumped into the second resistor is exactly equivalent to the RF power dissipated by the first resistor. The wattmeter problem is then reduced to the much simpler task of measuring that DC power input. Since the device is in an IC package it has little mass so its response time should be quite fast. LT has an application note on its web site and there was an article in a fairly recent issue of Electronic Design or EDN that described the external circuitry required.

The IC is about \$14-\$16 and the distributors that I checked with don't have it in stock. The supply situation should improve with time - the part is new - and the cost may seem either too much or quite a bargain depending upon your personal balance between accuracy and budget. It may be possible to synthesize an acceptably accurate version using discrete resistors and diodes. Electrical matching would be important as would thermal design. Surface mount parts would probably be needed to reduce thermal mass and improve coupling between the diode and resistor, possibly mounted on small cartridges or circuit cards that plug in to a larger board.

Dave Sarraf

-----  
Date: Fri, 21 Jul 2000 20:58:51 -0700  
From: Phil Wheeler <w7ox@earthlink.net>  
To: DYARNES@aol.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [75615] Re: Elecraft K1 Internal Pictures  
Message-ID: <39791BFB.EE110CC3@earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

DYARNES@aol.com wrote:

>  
> In a message dated 7/21/00 3:37:27 PM US Mountain Standard Time,  
> eric@elecraft.com writes:  
>  
> << <http://www.fix.net/jparker/norcal/meetings/july2000/july12.htm> >>  
>  
> Great pictures! Looks to me like there's enough extra room to add some

> goodies later, eh wat?  
>

Radman keeps aggitating for a KAT1; that would be my first choice for that space. But, unlike the K2, I don't see the labels on the front panel to support it. Of course, what we see in pix is not the production design, I guess.

Phil

-----  
Date: Sat, 22 Jul 2000 02:04:27 EDT  
From: AdamN7YA@aol.com  
To: brasspounders@egroups.com  
Cc: qrp-1@lehigh.edu, bugsandkeys@egroups.com  
Subject: [75616] Re: [brasspounders] New Products at Morse Express  
Message-ID: <be.6f0abe1.26aa936b@aol.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"  
Content-Transfer-Encoding: 7bit

In a message dated 7/21/2000 8:25:46 PM Pacific Daylight Time,  
mgemm@mtechnologies.com writes:

<< From CT Keys, a new version of the Classic Camelback, the Deluxe version is

mounted on a polished oak base and comes with attached cable. It's \$199.95.

>>

While on the subject of CT keys...i dont work for Anton or have any fiscal gains in his ventures, but i did purchase a key from him. I decided on the CTIII hand key...it caught my eye and i figured "why not". it took a few weeks to get here from the Ukraine, but when i opened it (along with two other old soviet keys i ordered) I was amazed!!

The CTIII is by all accounts, a SWEET key!! it is my main straight key now...the craftsmanship is well above a good standard, quite exceptional, the feel is like a sports car, and the appearance is like those car commercials where the new owner washes away his yard just looking at it....it is a solid investment if you want to have a taste of what Ukranian Key makers can do. you wont be disappointed. the base and knob are solid oak, the polished brass parts looks like its solid gold, the key parts are slightly smaller than a comparable key affording more control and speed...dits dont get sluggish and the hand doesnt get tired as quickly. and the screw knobs and wheels are larger than thier counterparts for more accurate adjustments...Anton really knows how to put a key together!! a great piece of machinery! well packed too.

By the way, i paid my money, went the usual route and he solicited no good

comments from me...i am just moved enough to write this myself as a happy CTIII owner. Anton is very professional and pleasant to deal with. just something to keep in mind if you ever need a good key.

73...Adam, N7YA  
QRP-L 1608, SOC 143  
Flying Pig #86  
DXer...cant help it!  
CW Spoken Here . .

-----  
Date: Sat, 22 Jul 2000 06:12:10 -0500  
From: "Chuck Carpenter" <w5usj@globeco.net>  
To: qrp-l@Lehigh.EDU  
Subject: [75617] Magnet Wire Source  
Message-ID: <3.0.2.32.20000722061210.0068e5ac@bosshog.globeco.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

QRP-Lers,

Here's a good source of magnet wire for antennas and for winding toroids, bal/ununs etc...

<http://www.action-electronics.com>

Order via Inet

Small quantity orders OK.

Prompt response, timely delivery

Many sizes in 1/4, 1/2, and 1 lb spools.

The wire received with a redish color coating appeared to be thermaleze and soldered without stripping.

Chuck Carpenter, EM22cv, Point, Rains County, Texas

-----  
Date: Sat, 22 Jul 2000 12:39:40 +0100  
From: "Larry Wise" <lewise@txwises.com>  
To: "qrp" <qrp-l@lehigh.edu>  
Subject: [75618] Re: plcc 28 pin socket pin info - where?  
Message-ID: <200007221241.HAA63033@aoot.com>

MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

Found it in an AMP drawing at the AMP web site...

Larry KA5T

-----  
Date: Sat, 22 Jul 2000 09:05:57 EDT  
From: Rick McKee <kc8aon@juno.com>  
To: qrp-l@Lehigh.EDU  
Subject: [75619] Callsign lookup via QRP-L  
Message-ID: <20000722.090600.4479.4.kc8aon@juno.com>

Gang,

Anyone else having problems with the callsign lookup feature via QRP-L  
? Lately when I try to get info from it, all I get is The callsign back,  
the license issue & renewal date, grid square etc etc..... but no  
mailing address - What's going on ? Maybe the list operators can shed  
some light on it for me - PLEASE !

73...Rick McKee KC8AON { CW lives as long as I do ! }  
Willow Wood, Ohio "oo's"  
AR QRP # 269 QRP-L # 2112 ZOMBIE # 718 FPqrp # 33  
TriState BrassPounders # 1

-----  
YOU'RE PAYING TOO MUCH FOR THE INTERNET!  
Juno now offers FREE Internet Access!  
Try it today - there's no risk! For your FREE software, visit:  
<http://dl.www.juno.com/get/tagj>.

-----  
Date: Sat, 22 Jul 2000 09:36:02 EDT  
From: Macstein@aol.com  
To: abailey@clas.net, qrp-l@lehigh.edu  
Subject: [75620] Re: RAMBLINGS: Novic Frequencies  
Message-ID: <67.72a3176.26aafd42@aol.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"



Content-Transfer-Encoding: 7bit

In a message dated 07/21/100 10:08:18 PM EST, abailey@clas.net writes:

> Likewise, I can only put my Vec-1240 on 7122, I've also got 7040 but  
> using that freq will have to wait until I upgrade. Thanks for the  
> info on Patty Lovelace, I'll have to try and hear her.  
> 73  
> Tony  
>  
> >If you hear me on the 40 meter Novice section I can only put my TT2 on  
7113  
> >and 7116....only got those 2 crystals for that area. If you like country  
> >music look for Patty Lovelace 7110 to 7120.  
> >73  
> >Jim  
> >W1R0/7  
>  
> Sent from Anthony Bailey KC0HZP (mailto:abailey@clas.net)

I'm just wondering...are you guys talking about hearing Patty on Broadcast  
Splatter -- as in her singing on the radio -- or has she been doing CW? She  
is a ham, and that would be a neat QSL card! - grin.

72 es "oo"

-MAC-

AF4PS

Odessa, FL "Home of the Infamous Attic Dipole"

QRP-L # 704, FISTS #5096, CC #754, NorCal #1998, Zombie #510, ARCI #9843,  
AR QRP #257, HI QRP #83, Whiners #5, SOC #28, West FL QRP, ARS #751  
Flying Pig QRP #-51 and various other annual \$15 commitments.

-----  
Date: Sat, 22 Jul 2000 10:05:32 EDT

From: Drbob92031@aol.com

To: qrp-l@lehigh.edu

Subject: [75621] FREE MAGNET WIRE

Message-ID: <4e.8a6e126.26ab042c@aol.com>

MIME-Version: 1.0

Content-Type: text/plain; charset="US-ASCII"

Content-Transfer-Encoding: 7bit

I have been using the following as a free source of fine shellac coated wire  
for years.

Try the yokes around TV tube necks. Miles of wire for the unwinding.

72...de wa2eaw.Bob

-----  
Date: Sat, 22 Jul 2000 10:16:11 -0400  
From: "Charles DD Feigley Sr." <feigley2@juno.com>  
To: qrp-1@lehigh.edu  
Subject: [75622] For Sale  
Message-ID: <20000722.101612.-364127.0.feigley2@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain  
Content-Transfer-Encoding: 7bit

For sale, Ten Tec Century-21 analog transceiver. Doe's 5- 40 watts out.  
Also included is the model 276 crystal calibrator and the model 670  
electronic keyer. These 2 items are the matching items for the century.  
Price is 175.00 and you pay 10.00 shipping.

Thank You

Charlie

-----  
YOU'RE PAYING TOO MUCH FOR THE INTERNET!  
Juno now offers FREE Internet Access!  
Try it today - there's no risk! For your FREE software, visit:  
<http://dl.www.juno.com/get/tagj>.

-----  
Date: Fri, 21 Jul 2000 14:11:15 -0600  
From: Jeff Francis <jfrancis@frii.com>  
To: ECatlinN5mzxqrp@aol.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [75623] Re: Latin for Less Power More Fun  
Message-ID: <3978AE63.72337DD2@frii.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Vi Minore, Plus Gaudium

ECatlinN5mzxqrp@aol.com wrote:

>  
> can someone send me the latin for this. It was posted some time ago and I  
> lost my copy. I want to put on my QSL card  
>  
> 73/72  
> Ev N5MZX

--  
+-----+-----+

	Jeff Francis - KCOBWS/AE			
	Sr. Systems Engineer		"The legitimate powers of	
	Nortel Networks / Shasta		government extend to such	
	Denver, CO USA DM79nr		acts only as are injurious	
	39d43m16.4s N 104d52m10.7s W		to others."	
	jfrancis@frii.com		-- Thomas Jefferson	
	http://www.frii.com/~jfrancis			

+-----+-----+

-----

Date: Sat, 22 Jul 2000 10:57:51 -0500  
 From: "Jim Crooke" <crooke@prodigy.net>  
 To: <qrp-l@lehigh.edu>  
 Subject: [75624] FS: Red Hot 40  
 Message-ID: <200007221600.MAA127044@pimout8-int.prodigy.net>  
 MIME-Version: 1.0  
 Content-Type: text/plain; charset=ISO-8859-1  
 Content-Transfer-Encoding: quoted-printable

I have an unbuilt RH-40 that keeps getting pushed back by honeydoo's. =  
 I'll sell it for the \$140 I paid or I'll eventually get around to it.

72, Jim WB0HQV  
 Springfield, MO

-----

Date: Sat, 22 Jul 2000 10:01:44 -0600  
 From: "James R. Duffey" <jamesd1@flash.net>  
 To: qrp-l <qrp-l@lehigh.edu>  
 Subject: [75625] The Impact of Operating QRP in Sweepstakes  
 Message-ID: <B59F2187.1C8C%jamesd1@flash.net>  
 Mime-version: 1.0  
 Content-type: text/plain; charset="US-ASCII"  
 Content-transfer-encoding: 7bit

All - I posted this in slightly different form to the Antennatalk reflector.  
 Tom, W8JI, wondered out loud what difference a dB made in contest. I  
 collected the following figures from the 1999 CW Sweepstakes and posted  
 them. I thought they might be interesting to this group as well.

So here is roughly what a dB was worth in the 99 CW Sweepstakes:

Station	Power	dB(5W)	Sec	dB(5W)	QSOs	dB(5W)
W4PA	5W	0	79	0	796	0

NT1N	100W	13	79	0	1145	1.6
WP3R	1500W	25	79	0	1410	2.5

Forgive the liberties I have taken with the dB. ;^)=

It appears in SS dBs don't mean much in getting multipliers. All the stations, regardless of power, had the same number of sections. This was similar to an analysis I did a few years ago, when the 100 W station had 75 sections and the QRP and High Power stations both had 77. (A clean sweep then)

A 25 dB increase in power results in a 2.5 dB increase in QSOs. It does look like a dB is worth a bit "more" in going from 5W to 100 W than from 100 W to 1500 W.

Not scientific as I said, although I play one in real life. Somebody wanted to know what a dB was worth in a "real" contest. There it is. Don't take it too seriously.

Now I realize that there a lot of variables here which I have ignored. I am in the "assume a spherical chicken (dB) mode". But it is probable that all three stations have "great antennas" well matched to working US multipliers in SS. And I suspect that all three have good locations. Being in Puerto Rico probably helped WP3R, but Connecticut and Tennessee are certainly not rare sections.

Long ago I recall that QST used to publish the equipment that some of the winners used. Transmitter, receiver, and antennas were listed in a big chart. Maybe automatic CQers when they were new? This was back when we had to send the time as part of the exchange.

This is fun. I think I will analyze a DX contest next. Any suggestions?? Thanks for your attention.

Since I posted this Jeff, K4JNY sent me this additional information on the W4PA set up:

W4PA oped from my qth, the station is a joint effort between us. Scott W4PA does the cw contests and I do the ssb contests.

At the time of SS CW the antennas where as follow 10M 4X4 @ 25/45 top rotatable, 15M 3 ele @ 55, 20M TH-6 35/70 top rotates, 40M dipole, vertical array fixed NE, 80M 2 ele vertical array, and 5 short bev for rx. The big signal advantage of this station is that it is on a ridge top approx 150' above average terrain. The rigs used were two Omni6+s. In SS two radio stations have a big advantage. - Dr. Megacycle KK6MC/5

--

James R. Duffey KK6MC/5  
30 Casa Loma Road  
Cedar Crest, NM 87008

--

James R. Duffey KK6MC/5  
30 Casa Loma Road  
Cedar Crest, NM 87008

-----  
Date: Sat, 22 Jul 2000 09:02:24 PDT  
From: "Alan Fryer" <n3bj@hotmail.com>  
To: qrp-l@lehigh.edu  
Cc: qrp@qth.net  
Subject: [75626] WTB: DSW-40 xcvr  
Message-ID: <20000722160224.7875.qmail@hotmail.com>  
Mime-Version: 1.0  
Content-Type: text/plain; format=flowed

Wanted: Built or unbuilt DSW-40 xcvr. Might consider 20M model. If you have one that is surplus to your needs, please let me know.

Alan, N3BJ

-----  
Get Your Private, Free E-mail from MSN Hotmail at <http://www.hotmail.com>

-----  
Date: Sat, 22 Jul 2000 11:19:57 -0500  
From: "Jim Crooke" <crooke@prodigy.net>  
To: <qrp-l@lehigh.edu>  
Subject: [75627] RE: FS:Red Hot 40  
Message-ID: <200007221622.MAA248530@pimout8-int.prodigy.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: quoted-printable

Folks, it is spoken for, and fast!

-----  
Date: Sat, 22 Jul 2000 09:30:41 -0700  
From: Wayne Burdick <n6kr@elecraft.com>  
To: elecraft@qth.net, qrp-l@lehigh.edu

Subject: [75628] Built-in ATU option for the K1: the KAT1  
Message-ID: <v0310280cb59f6e274214@[206.169.248.204]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Dave, W7AQK wrote (in a posting to QRP-L):

>>Great pictures! Looks to me like there's enough extra  
>>room [inside the K1] to add some goodies later, eh wat?

Dave,

Thanks for this observation. We figured it was about time to let the "KAT" out of the bag: there *will* be a very low-cost internal automatic antenna tuner for the K1. This is in keeping with our goal of making the K1 an all-in-one-box, light-weight solution for portable operation. (We're also hoping to offer an internal battery option sometime in the future, as well as a keyer paddle that attaches directly to the wide-range tilt-stand, eliminating the need for a paddle with its own heavy base.)

The KAT1 will consist of one PC board, 1.8 x 5 inches, that plugs directly into the K1 with no wiring. All components are through-hole, mounted on one side of the board, and assembly will be very easy. The K1's existing antenna jack becomes the KAT1's antenna jack.

The KAT1 will nominally cover 40 through 15 meters, the bands presently available for the K1. As with the KAT2 (the K2's internal tuner), the KAT1 will provide a number of useful functions. The LCD on the K1 will be able to display forward or reflected power, SWR, and other data. Latching relays are used, so the current drain added by the KAT1 will be zero except when actually tuning. The L/C/network parameters for each band will be stored in EEPROM for instant band switching.

We're really excited about the KAT1, since it will allow an end-fed wire to be directly connected to the K1 and used on both bands. Of course the tuner can also be used with other antennas, and a small balun can be added to allow the use of balanced feedlines. But you can't beat the light weight of 30' of #26 enamel wire, tossed into a tree (plus a ground radial or two).

We'll announce the KAT1 price and availability soon.

73,  
Wayne, N6KR  
Eric, WA6HHQ

P.S. I need to acknowledge the more or less continuous lobbying for the KAT1 on the part of Conrad Weiss, NN6CW. Conrad shares our passion for field operation, and, probably because he lives only a mile from me, we've

gotten helpful ATU suggestions from him on almost a daily basis. I have no doubt that he'll be looking over my shoulder when I build the next prototype. -- Wayne

-----  
Date: Sat, 22 Jul 2000 11:25:18 -0500  
From: "Chuck Carpenter" <w5usj@globeco.net>  
To: qrp-l@Lehigh.EDU  
Subject: [75629] PSK31 & ThinkPad ??s  
Message-ID: <3.0.2.32.20000722112518.007c1440@mail.globeco.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

PSK-31 QRPers,

Anyone using a ThinkPad 1200 (or equiv.) to do the PSK-31 thing?

How did you make the interface connections? (Using DigiPan software.)

For initial testing, I'm using a mic next to a speaker to receive and a small speaker next to the xcvr mic for transmitting. Fun for the moment but not too useful for the long run.

I'm going to see if I can get the specs for the various serial and parallel connectors the ThinkPad uses through IBM (?).

But, if anyone's already done it, I'd sure appreciate any info, comments, or suggestions.

Chuck Carpenter, Point, Rains County, Texas -- EM22cv, RARA #003  
ARCI #5422, QRP-L #1306, SOC #57, Six Club #201, SMIRK #6275

-----  
Date: Sat, 22 Jul 2000 09:33:07 -0700 (PDT)  
From: Jeff <fantbb@yahoo.com>  
To: qrp qrp <qrp-l@lehigh.edu>  
Subject: [75630] Wanted RedHot 20  
Message-ID: <20000722163307.15476.qmail@web112.yahoomail.com>

MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii

Anyone have a Redhot 20 they want to sell?

Jeff

=====

Jeff Jones  
AB6MB  
NorCal QRP Club #65, QRP-L #1780, ARCI 10071  
Radical FIST Member 6798  
Voicemail/Fax 1-888-Excite2 ext 925-439-2514  
ICQ 62450117

-----  
Do You Yahoo!?  
Get Yahoo! Mail Free email you can access from anywhere!  
<http://mail.yahoo.com/>

-----  
Date: Sat, 22 Jul 2000 11:47:43 -0500  
From: Lee Bahr <w5drc@earthlink.net>  
To: Drbob92031@aol.com  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [75631] Re: FREE MAGNET WIRE  
Message-ID: <3979D02F.8F4CB1EA@earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Yea, but if I did that my wife would kill me for destroying her TV set!  
Lee Bahr w0vt

Drbob92031@aol.com wrote:

>  
> I have been using the following as a free source of fine shellac coated wire  
> for years.  
> Try the yokes around TV tube necks. Miles of wire for the unwinding.  
> 72...de wa2eaw.Bob

-----  
Date: Sat, 22 Jul 2000 12:49:46 -0400  
From: KD1YV <kd1yv@mindspring.com>  
To: qrp-l@Lehigh.EDU  
Subject: [75632] Re: RAMBLINGS: Novic Frequencies



Message-ID: <3979D0AA.9D1920D4@mindspring.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Oh, great, now we're going to have to fight huge pileups in the  
Novice sub-band <grin>

--

72/73 de Jim, KD1YV  
Minister Without Portfolio

> Subject: Re: RAMBLINGS: Novic Frequencies  
> W1R0@aol.com  
> Date: Fri Jul 21 2000 - 20:40:39 EDT  
>  
> If you hear me on the 40 meter Novice section I can only put my TT2 on 7113  
> and 7116....only got those 2 crystals for that area. If you like country  
> music look for Patty Lovelace 7110 to 7120.  
> 73  
> Jim  
> W1R0/7  
>

-----

Date: Sat, 22 Jul 2000 13:51:06 EDT  
From: NB6M@aol.com  
To: w5usj@globeco.net  
Cc: qrp-l@lehigh.edu  
Subject: [75633] Re: PSK31 & ThinkPad ??s  
Message-ID: <48.889508d.26ab390a@aol.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"  
Content-Transfer-Encoding: 7bit

I'm not using a Thinkpad, but am using Toshiba Laptop which has jacks for  
stereo earphones and for a microphone. Sounds like your Thinkpad does too,  
from your description.

My rig for PSK-31 is a Yaesu FT-757GX II, and what I did for receive audio  
was to use one cable with 1/8" Miniature Phone plugs on each end, and plugged  
one end into the auxiliary speaker jack on the back of the rig and the other  
end into the mike jack on the laptop.

In order to be able to hear the received signals, as well as have them go to  
the laptop mic input, I plugged a mini phone plug to two mini phone jack

adaptor into the speaker jack on the back of the radio so I could plug a speaker into one jack and the line to the laptop into the other.

For transmit audio, I used a cable that had a 1/8" stereo miniature phone plug on each end, plugged one end into the earphone jack of the laptop, and the other end into a jack on a small box, which for PSK-31 essentially contains the resistive attenuator described in the help file of the Digipan program, and a switch that allows me to select either the PSK-31 audio or Microphone audio to go through the cable from the small box to the microphone input of the rig.

You could do it by making up a cable with a microphone plug on one end that fits your rig, a small plastic box in the middle with the resistive attenuator, and a stereo miniature phone plug on the other end to go to the earphone jack on the laptop. The small box could contain a toggle switch for keying, if desired, also.

Because the PSK-31 audio signal is monaural, just parallel the stereo earphone audio wires inside the small box, on the back of the jack where the stereo cable plugs in, and you can use one of the resistor leads for the attenuator to do it, and then run the output of the attenuator to the audio line for your microphone input to the rig.

For keying, you can either manually key the rig if you have a key switch, try adjusting your vox circuit so that it keys automatically (not as reliable), or make up the keying circuit described in the help file for Digipan. However, since you are already able to get on the air with the microphone and speaker, you probably have figured out your keying needs for the moment.

You can use both your Mike Gain control on the rig and the volume control on the laptop to adjust the amount of audio going to your microphone input on the rig. Follow the instructions in the help file in Digipan for setting the amount of drive. I typically set my mike gain to provide 5 Watts output, and can adjust upwards if band conditions warrant, but I don't go above 40 watts or so, in order to prevent overdriving and IMD.

Also, I found after looking at the audio from the laptop going into the attenuator with a scope, that the sine wave was distorted, that is, flattened, or overdriven. So I clicked on "configure", then on "Transmitter Drive" and brought the volume control on the left end of the window down to the second mark from the top, and then the audio going to the attenuator was fine, with no distortion. As they say, your mileage may vary, but bringing that volume control down a bit is one thing to try if you get poor IMD reports.

Good luck with it, PSK-31 is lots of fun.

Wayne NB6M

72

Wayne NB6M

-----  
Date: Sat, 22 Jul 2000 12:34:49 -0600  
From: "James R. Duffey" <jamesd1@flash.net>  
To: qrp-l <qrp-l@lehigh.edu>  
Subject: [75634] 10 M and 15 M Useful Even When Solar Flux is Down  
Message-ID: <B59F4569.1C95%jamesd1@flash.net>  
Mime-version: 1.0  
Content-type: text/plain; charset="US-ASCII"  
Content-transfer-encoding: 7bit

All - The recent comments on the quality of the present solar cycle prompted this post.

It is time to stop thinking of 10 M (and 15M) as only being useful during years around the solar peak. They support useful propagation even at the solar minima.

Sporadic-E (also called E-skip or short skip) can occur year around on 10 M and 15 M, despite the value of the solar flux. It is most prevalent during May through August and November through January. It peaks in mid morning and evening. Sporadic - E is not a DX mode, but contacts up to 3000 miles can be made with low power. Sporadic - E is the bread and butter of 6 M, but it is even more common on 10 M. Yet not many QRPers take advantage of it.

10 M and 15 M are often open on North-South paths even when the solar flux is low. The paths peak an hour or so after local noon. I have worked many South America stations in the early afternoons on 10 M during the solar minimum.

There is also a phenomenon called trasnequatorial propagation which occurs the weeks around the equinoxes, March 21 and September 21. Propagation between stations roughly equally spaced north and south of the magnetic equator have enhanced propagation, even at solar minima.

All of these modes can be used on QRP. The NCDXF beacons are a good way to monitor DX activity on 10 M and 15 M. The 10 M beacons are on 28.2 MHz, and the 15 M beacons are on 21.15 MHz. They cycle through 18 locations around

the world every 10 seconds and send tones at 100 W, 10 W, 1 W, and 0.1 W. I often hear the beacons loud with little or no activity on the bands.

On 10 M there are a lot of domestic beacons, most at 5 W or less, between 28.2 MHz and 28.3 MHz. I often copy beacons from heavily populated areas with no resulting activity on 28.06. From this I conclude that most QRPers ignore 10M unless it is "wide open". A dedicated 10 M Xcvr monitoring 28.06 in the shack would result in a lot of contacts if lots of QRPers did it.

I was disappointed when Wayne announced the the KAT-1 would only work through 15M. I suppose that this means the K-1 will not be available in a 10 M version. I was looking forward to getting a 10M-15M version to complement my OHR QRP Classic on 20M and 40M. Oh well.

Listen to 10 M more often, even at the solar low. You will be surprised what can be worked. - Dr. Megacycle KK6MC/5

--

James R. Duffey KK6MC/5 DM65  
30 Casa Loma Road  
Cedar Crest, NM 87008

-----  
Date: Sat, 22 Jul 2000 13:49:38 -0700  
From: "jay henson" <jbhenson@zebra.net>  
To: "QRP-L" <qrp-l@Lehigh.EDU>  
Subject: [75635] FOX and Other things  
Message-ID: <006901bfff41e\$5a755b60\$670f0cd1@default>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hi to everyone,

To have started with 3 out of 3 foxes and wind up at 3 out of 5 now is a little depressing. Al's signal was not heard in Mobile until 0240Z and it was very weak. In fact, the few hounds that were heard were also weak. Static noise from the local storms was about s3 or s4 and really did not help. I gave Al several shots and he responded with dididadadidit but no fox tail.

All in all, it was a nice evening though. I believe it has been said before "A bad day on the radio is much better than a good day at work" or something to that affect. I am not really sure that there is such a thing as "bad day on the radio" HI!.

jay  
AJ4AY - Mobile, AL  
QRP-L 1372    ARCI 8131    SOC 220  
"All too often, we do smart things only after exhausting every  
conceivable dumb thing we could have done."

On Sat, 22 Jul 2000, Lee Bahr wrote:

But your children may thank you years from now. :})

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      ,-----'
      /      What's all this      \
      / extinct stuff, anyhow?    /
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      \      | | | | \      ' .
      \      c _ _ ; c _ _ ; ' - . . ' > . _ _

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Email: [ctrask@primenet.com](mailto:ctrask@primenet.com)  
<http://www.primenet.com/~ctrask>

Graphics by Loek Frederiks

-----  
Date: Sat, 22 Jul 2000 14:53:55 -0700  
From: Eric Swartz WA6HHQ - Elecraft <eric@elecraft.com>  
To: EleCraft mail list <elecraft@qth.net>  
Cc: QRP-L <qrp-l@lehigh.edu>  
Subject: [75637] New Info on Elecraft Builder's Page  
Message-ID: <397A17F3.533E66A6@elecraft.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

We have extensively reorganized the Elecraft Builder's Resource Page at:  
<http://www.elecraft.com/Apps/K2info.html>

We have added a number of new application notes including new filter  
adjustment notes from Tom, N0SS, PSK31 info, a centralized K2 mod's page and  
a new K2 reference card by Van, NS6N.

Please take a look and let us know what you think and what else you would  
like to see.

73, Eric WA6HHQ

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<http://www.elecraft.com>

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End of QRP-L Digest 1890

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